Source Four mini

CE User Manual

Revision A

Table of Contents

CE DECLARATION OF CONFORMITY

ETC

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We, Electronic Theatre Controls Limited

declare under sole responsibility that the product:

Product name:	**Source Four Mini luminaire**
Product type/model:	**Source Four Mini Canopy mount, Source Four Mini Track mount & Source Four Mini Clamp mount. Versions fitted with tungsten lamp.**
Item numbers:	**One sample of each type**

to which this declaration relates is in conformity with the following Standards:

EN 60598-1:2008	**Luminaires. General requirements and tests**
EN 60598-2-6:1995	**Luminaires. Particular requirements. Luminaires with built-in transformers for filament lamps**
EN 60598-2-17:1989	**Luminaires. Particular requirements. Specification for luminaires for stage lighting, television, film and photographic studios (outside and indoor)**

following the provisions of EU LV Directive(s) 2006/95/EC

EN 55015:2006	**Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment**
EN 61547:2009	**Equipment for general lighting purposes. EMC immunity requirements**
EN 61000-3-2:2006	**Electromagnetic compatibility (EMC). Limits. Limits for harmonic current emissions (equipment input current up to and including 16 A per phase) Class C**
EN 61000-3-3:2008	**Electromagnetic compatibility (EMC). Limits. Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current <= 16 A per phase and not subject to conditional connection**

following the provisions of EU EMC Directive(s) 2004/108/EC

London, United Kingdom
(Place of issue)

Mr Adam Bennette
(Name of authorised person)

11th March 2013
(Date of Issue)

(signature of authorised person)

EUROPE ▪ ASIA ▪ AMERICAS

Source Four Mini CE Guidelines

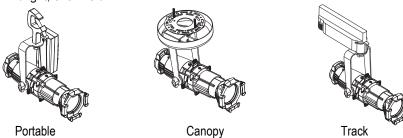Read the entire User Manual before using the equipment.

WARNING: **Please note the following safety precautions:**

- Do not mount the Source Four Mini CE on or near a flammable surface.
- The Source Four Mini CE is suitable for indoor use only with a maximum ambient temperature: 40°C.
- Maximum exterior surface temperature: 125°C.
- Relative humidity 90% maximum, non-condensing
- If the external cable is damaged, it shall be replaced by ETC or our service agents.
- Always hang the Source Four Mini CE with the colour frame held securely behind the retaining clip.
- Always replace the lamp if it becomes damaged or thermally deformed.
- Disconnect the unit from power before all cleaning and maintenance.
- Keep the luminaire at least 3cm away from any lit surface. Lighted objects at this distance or greater will not exceed 90°C temperature from projected light.

Introduction

The Source Four Mini has four field-angle choices and comes in a portable version with a miniature C-clamp and yoke mounted transformer, a canopy-mount design with an integral transformer, and a track-mount design with an integral transformer. Surprisingly bright for its size, the Mini offers crystal-clear image projection and a bright, even field.

Portable   Canopy   Track

There are three versions of the Source Four Mini. This manual covers common features for all versions. For information on installing the canopy and track-mount variations, see the Source Four Mini Canopy and Track-Mount Kits Installation Guide. For information on adjusting the miniature C-clamp on the portable variation, see *Adjusting the C-clamp on the Portable on page 7*.

WARNING: <u>**Please note the following safety warnings before use:**</u>
Do not mount the luminaire on or near combustible surfaces.
Always hang the luminaire with the colour frame retaining clip in the locked position.

WARNING: <u>**Track Mount Version**</u>
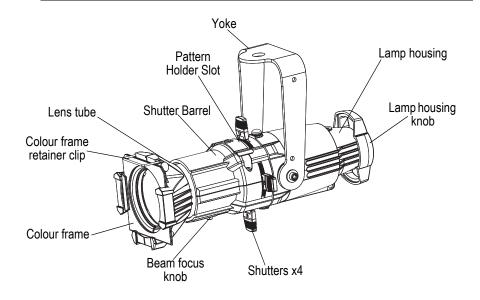**To reduce the risk of fire and electric shock, use only with EUTRAC track system.**

Note: *Track Mount Version*
For best results with 230v, it is recommended that reverse phase dimming be used.

Basic Assembly

Yoke

Pattern
Holder Slot

Lamp housing

Lens tube

Shutter Barrel

Lamp housing
knob

Colour frame
retainer clip

Colour frame

Beam focus
knob

Shutters x4

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR
INJURY TO PERSONS

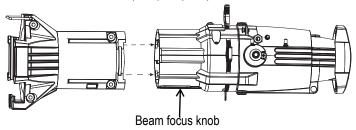## **IMPORTANT SAFETY INSTRUCTIONS**

Lighted lamp is HOT!

WARNING - To reduce the risk of FIRE, ELECTRIC SHOCK, EXPOSURE TO
EXCESSIVE UV RADIATION, OR INJURY TO PERSONS:

1) Turn off/unplug and allow to cool before replacing lamp.

2) Lamp gets HOT quickly! Only contact switch/plug when turning on.

3) Do not touch hot lens, guard, or enclosure.

5) Do not use in proximity to normally flammable materials.

6) Use only with a lamp rated at 50W or less.

SAVE THESE INSTRUCTIONS

Install Lens Tube

A lens tube must be installed prior to use of the Source Four Mini. There are four lens tube sizes available; 19°, 26°, 36°, and 50°.

Beam focus knob

Step 1:   Unscrew the beam focus knob from the loose lens tube.
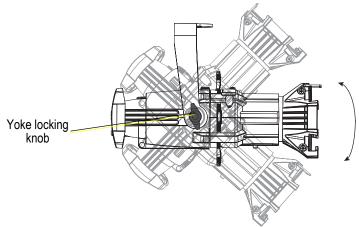Step 2:   Slide the lens tube into the shutter barrel.
Step 3:   Install the beam focus knob.

Adjustments

Adjusting the yoke position

The Source Four Mini provides multi-positioning capabilities within its yoke for overall luminaire angle.

Setting the angle with the yoke
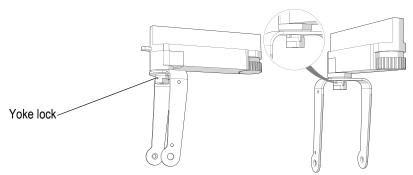
Yoke locking knob

Step 1:   Loosen the yoke locking knob. **Do not** remove the knob.
Step 2:   Tilt the luminaire to the desired position.
Step 3:   Tighten the yoke locking knob to secure position.

Yoke lock

Step 1:   Rotate the luminaire into the desired position. Luminaire will be prevented from rotating completely around to protect the wiring.
Step 2:   Insert a 1.5mm Allen wrench into the small hole on the yoke lock.
Step 3:   Turn wrench to tighten down the yoke lock.

Focusing the beam

Step 1:   Loosen the beam focus knob located under the barrel. **Do not** remove the knob.
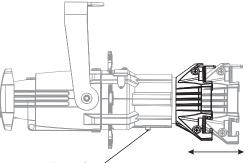Step 2:   Slide the lens tube forward or backward to achieve the desired beam edge.
Step 3:   Once the luminaire is focused, tighten the beam focus knob.
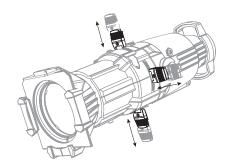

Beam focus knob

Shaping the Beam

The beam can be shaped using the four shutters or with a pattern.

The Source Four Mini has four shutters: left, right, top, and bottom. Each shutter can be pulled out or pushed in to create the desired beam shape.

5

Pattern Projection

The Source Four Mini has a pattern holder slot on the top side of the shutter barrel, in front of the shutter. It accommodates a E-size pattern holder.

Use an optional donut in the colour frame holder to enhance pattern projection.

When the slot is not in use, a small sheet metal cover secured with a Phillips screw prevents light leakage.

Step 1: Use a Phillips screwdriver to loosen the screw on the slot cover. Do not remove the screw.
Step 2: Slide the cover completely forward to expose the slot.
Step 3: Insert the pattern holder.
Step 4: Slide the slot cover back toward the shutters until it meets the pattern handle. Leave enough space to move the handle.
Step 5: Secure the slot cover by tightening the screw.

2.54cm Diameter

Shown at
actual size.

Colour Frame Holder

The Source Four Mini comes equipped with a 2 ¾" or 70mm colour frame, which is a metal frame used to hold colour media (often referred to as gel) in front of the lens. The colour frame holder is equipped with a retaining clip that prevents the colour frame from falling out.

WARNING: **Make sure the colour frame is locked in position with the retaining clip.**

Note: *The colour frame should be inserted open side down.*

Step 1: Release the retaining clip by gently pushing it up.
Step 2: Insert the colour frame.
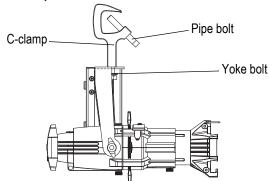Step 3: Lock the retaining clip by gently pushing it down.

Retaining clip

Colour Frame Holder

Additional accessories are available for the Mini that also fit into the colour frame holder. Those accessories are top hat, short top hat, half hat, short half hat, and donut. When an accessory is used, the colour frame should be installed in the rear slot of the holder.

Adjusting the C-clamp on the Portable

The C-clamp attaches the luminaire to the mounting pipe and allows you to adjust the position of the luminaire once it is mounted. The C-clamp will fit a 9.525 mm to 2.54 cm pipe.

Step 1:   Tightly fasten the C-clamp to the yoke with the provided yoke bolt and lock washer.

Step 2:   Place the C-clamp on the mounting pipe, and then tighten the pipe bolt to secure it.

Step 3:   Loosen the C-clamp yoke bolt and rotate the yoke to the desired position.

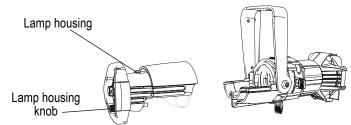Step 4:   Tighten the bolt to lock the luminaire.

CAUTION: *Tighten the C-clamp pipe bolt to about 2 N-m. (Approximately finger tight plus up to one-quarter turn.) Do not use excessive force.*

Note: *The Source Four Mini yoke has a C-clamp hole for an M10 bolt.*

Replacing the Lamp

Lamp housing

Lamp housing knob

Step 1: Disconnect power to the Source Four Mini before installing the lamp.
Step 2: Loosen the brass lamp housing knob on the back of the lamp housing. The knob is not captured so it may come loose from the luminaire.
Step 3: Pull the lamp housing away from the luminaire body.
Step 4: Pull on the lamp carefully to remove it from the lamp housing.
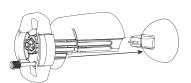Step 5: Gently push down on the replacement lamp until it is seated in place.
Step 6: Realign the housing into the grooves of the luminaire.
Step 7: Align the knob with the hole, and tighten the lamp housing knob.

WARNING: *Allow the lamp housing to cool before replacing the lamp.*

CAUTION: *RISK OF FIRE - Use an MR16 lamp rated at 50 Watts or less.*

CAUTION: *DRY LOCATIONS ONLY.*

Note: *It is recommended to use an MR16 lamp with a nominal beam angle of 38 degrees.*

Cleaning the Glass Lens

WARNING: **Do not use ammonia-based or other harsh commercial cleaners. Clean lens only as directed.**

Commercially available glass cleaning agents should be avoided as they may contain ammonia, other harsh chemical detergents, or abrasive agents. These cleaners may damage the glass surface and the Anti-Reflective coatings. Do not immerse or soak the glass in any cleaning solution.

Step 1:   Remove the beam focus knob from the barrel.
Step 2:   Remove the lens tube from the barrel.
Step 3:   Remove dust with a blast of oil-free air or wipe with a clean, lint-free cloth. Isopropyl alcohol, distilled water, or a 50%-50% mixture of each can be used to clean the glass surface.
Step 4:   Slide the lens tube back into the barrel with the colour frame retainer clip on the top.
Step 5:   Reinstall the beam focus knob.